Problem Definition

In this problem case, the protagonist is TiVo, a company that attempts to revolutionize how consumer watch TV with its product, a black box that enables consumers to have full control of the TV with the features it provides to them, in addition to their services that enables consumers download their favorite programs, so that they are able to watch them whenever they want to. The problem they face is that fourteen months into the launch of their product and services, the company had signed just 42,000 subscribers, with a current rate of 14,000 new subscribers per quarter, achieving only a about .04% penetration, despite availability in most major consumer electronics stores across the nation.This issue becomes even a bigger problem when put into context, the young company is constantly losing money.

SWOT

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<td>Strengths

-TiVo took the control away from the networks and put it directly into the hands of the consumer. To empower consumers, the TiVo service provided them with a variety of specific features. With TiVo, you watch anything you want, when you want to watch it.

-TiVo's product was technological sothisphoticated at the time.

-Everyone who owned TiVo seemed satisfied with it, with 72% of owners even claiming that TiVo had made TV viewing "a lot more enjoyable." Ninety percent said they would recommend it to family and friends. Early adopters were raving deliriously in the online forums of TiVo's website.

-TiVo had a partnership of consumer electronics superstar brands Sony and Philips, that enabled effective distribution of the product.

-According to an independent study, 62% of TiVo owners watched more TV with the service than without, and 31% of the owners said that TV was their primary source of entertainment (as compared with 16% before ownership). Fifty-nine percent said that they watched programs that were once unavailable to them because of inconvenient scheduling, and there was a 31% decrease in channel surfing.</td>
<td>Weaknesses

-A major problem with the digital video recorder category was that its many functions were not as easy to explain as they were to experience.

-Viewers who watched live TV received it with a few-second delay, because TiVo recorded the signal before sending it to the television set.

-TiVo was highly priced.

-The company was faced with the challenging task of inviting people to change their consumption habits altogether, in a domain (TV viewing) that was deemed one of the most ritualistic elements of contemporary American life. Typically, with television, changes in technology have been slow. When we introduce TiVo in the household, it changes the balance of power overnight.

-Thumb buttons may lead to downloading shows adults don't intend to download, in addition to letting TiVo pack viewing habits for resale, which some consumers don't like as they feel their privacy has being infringed.

-TiVo brand awareness is low.

-Early adopters did not fulfill their role as effective advertisers of TiVo, because the product is too complex.

- The first-generation product was not free of problems.</td>
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<td>Opportunities

-Technological sophistication, which enabled TiVo, was rapidly improving, that would enable a better product at cheaper prices.</td>
<td>Threats

-A 50% salesperson turnover rate in consumer electronics stores made training efforts ineffective.</td>
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-The average household spent 7.4 hours per day watching TV, with the average adult spending about 4.3 hours per day in front of the screen. Americans regularly intensified their experience by purchasing larger television sets. Advanced home audio systems complemented their viewing. In 1999 the number of families owning a 25-inch or larger TV set and a surround-sound audio system reached 20 million. This number had increased by 300% since 1995. -Even though TiVo had sold a limited number of units by May 2000, industry experts were predicting that category sales would range between 350,000 and 800,000 units by year-end 2000, with anywhere between 30 million and 55 million units in use by 2005. -New sources of revenue for TiVo could emerge in the form of ‘Couch commerce’, greater personalization in ads (Marketers get to know viewing patterns), telescoping ads, pre-loaded ads available in the installation of the equipment and different version ads. (new way for marketers to promote their products).	-Emerging competitors with similar offerings such as the device called ReplayTV, UltimateTV by Microsoft, Jovio (start-up), and Seagate Technology and Thompson Multimedia join venture. -Networks and advertisers could sue TiVo as TiVo raised big questions for the networks, who essentially are aggregators of programming content. The conventional way that advertising agencies sold media space to marketers—on the basis of reach—would be jeopardized. -Often times the press discussed the features of the device, but it was not always to the advantage of the company, moreover, there was some confusion in the press as to how the new product category should be introduced

Diagnosis through causal analysis

A problem is the result of causes. In this part of the paper I will identify the different causes that has lead to our problem. To ease understanding, causes will be presented as if they were independent from each other, however, they are not as most of them are interconnected. In the next part of this case analysis document we will further highlight these connections.

Cause 1: Risk attached to the adoption of innovation and pricing.

Consumers tend to be risk-advert, this impedes their adoption of high-involvement products such as TiVo’s black box as it complicates their consumer decision process. Most consumers associate risk with financial gain and loss, in this case the risk is of $499 for a black box model with up to 14 hours of recording capacity, or $999 for a model with up to 30 hours, in addition to the TiVo service that came at an additional charge of $9.95 per month, $99 per year, or $199 for the lifetime of the unit. When put into context, TiVo was more expensive than most TV sets, moreover, with this product and service being so new there was no reference point, hence, risk was even higher. Furthermore, substitutes such as DVD were already well established and costed much less, in other words risk was lower than that of TiVo. Consequently, the pricing of $999 massively increased the risk associated with TiVo’s product, which intrinsically had risk associated with it as it was new. Therefore, most consumers were not willing to take on all of that risk and purchase the product.

Cause 2: Perceived complexity and lack of ease to communicate and observe beneficial features.

Perceived Complexity is how far an innovation is seen as difficult to understand and use. Products such as TiVo, which are perceived as complex by consumers tend to not be adopted by consumers not only because consumer are 'lazy' and won't be attracted by things they thing are complicated, but also because it is hard to communicate and observe their features. This is exemplified by TiVo in the fact that often times the press discussed the features of the device, but it was not always to the advantage of the company, moreover, there was some confusion in the press as to how the new product category should be introduced. Furthermore, salespersons didn't know how to promote the product in-store, which causes a great discrepancy in regards to how differents salesperson speak about the product with furthers confuse and undermines some of TiVo's 'wow' features.

Cause 3: Lack of compatibility with existing patterns of behaviour.

TiVo's product faced the challenge of changing consumer's consumption habits altogether, in a domain (TV viewing) that was deemed one of the most ritualistic elements of contemporary American life, where changes in technology have been slow. In other words, TiVo lacked compatibility with existing patterns of behaviours and complementary products. This is a cause as consumers don't like to change their behaviours and they are less inclined to do so with all the other causes described here.

Cause 4: Incorrect STP.

The STP model was created to enable companies find their ideal target market and define their position. Nevertheless, all of mentioned earlier assumes that the first step, segmentation, is done correctly, which is not always easy. The classical ways companies segment the market is by age, gender, income, education, marital status, profession and ethnicity. Once the market is segmented, the company could choose the segments that best fit their product and target the product to those markets. Some important factors to consider when targeting a market are accessibility, size, money and difference. Positioning the product is the last step of the STP model. It consists on making your product known in an specific target market.

We may infer this procedure was incorrectly done as the targeted customer segment hasn't deliver the expected value to the company as only a .04% market penetration has being achieved after 14 months and early adopters haven't fulfill their role of opinion leaders, in addition to the fact that the 'position' that the company has decided to position its product in hasn't enable the company to effectively marketer its product.

Cause 5: IMC.

A company must make sure to effectively manage and use the five promotion mix tools they have to communicate customer value, which are mission, money, message, media and measurement, and this promotion mix tools should always follow the principles of consistency and complementary to fulfill the mission of the campaign. TiVo hasn't been able to effectively implement IMC and as a result there messages as of now are not consistent nor complementary. This is shown by the fact buyers and sellers alike don't know what value the company's product provide to the consumer. Moreover, the company enjoys of little to no brand awareness.

Overall diagnosis

FLC

After the launch of a new product, the new challenge the firm faces is making the product have a long and productive life, as no new product is expected to sell forever, but the firm should at least make a profit to cover for all the effort and risk that went into launching the product. A typical product life-cycle (PLC) is a simple graph that consist of four main stages: introduction, growth, maturity and decline. The y-axis represent sales, while the x-axis is time.

The introduction stage, where TiVo's product is currently located consist in a period of slow sales growth due to difficulties such as customer's and dealer's hesitation to buy an alternative (new) product. Most of the time, profits can't be attained in this stage due to large cost that go to promotions and development of the product. High promotional costs are usual in this stage as the company must adopt various marketing strategies with the objective of creating consumer awareness towards the new product. When embarking on a marketing strategy on this stage, market knowledge and branding is vital, something that as seen in the earlier part of this paper, TiVo is currently not achieving due to a high perceived complexity, lack of ease to communicate and observe beneficial features, incorrect STP and an inefficient IMC. Subsequently, given that the market is limited with regards to competition and the company isn't already well established, the company should opt on releasing the product with a low price, which will help ,build consumers awareness in combination with high promotion spending to attract the 'innovators" and thus, establish the company in the market.

After the introductory stage, the growth stage comes by. Growth is the second stage in the PLC. It's categorized by rapid product's sales, reduction of cost per buyer to the company and increasing profits. The rate of growth relies in various factors such as the marketing strategy adopted by the company and the external marketing environment. If TiVo continues their current strategy, there is the possibility that they don't get to this stage. Marketing strategies implemented by TiVo on this stage must know focus on informing the potential customers about the comparative advantages of the product to maximize the company's market share as the threshold of awareness has been already been crossed and the level of competition rises. To show the comparative advantages the product have, the promotion strategies must focus on advertising the product quality and features. Tivo should also focus on creating a brand image via constant marketing themes is also relevant in this stage. Moreover, the company should focus on distributing the product intensively, which to an extent has already been achieved. The company should also look to reduce cost by becoming an economy of scale and via reducing promotion expenditure (as demand for the product is already considerable). Furthermore, the quality of the product could be improve, not only by adding new features to the product, but by improving its distribution, placement, product packaging among other things to increase the level of consumer satisfaction.

In the long-run the third stage and the fourth stage in the PLC would come. In the third stage, maturity, TiVo should focus on profitability as there is a slowdown in sales growth as the product has already reach most potential buyers. By this point, the company should not invent any more in the product as they have already achieved brand loyalty and are able to maintain their market share through that. Decline, the fourth stage is were Tivo "harvest" the product and delete it from its product line.

As inferred throughout the earlier paragraphs, TiVo should focus on increasing their market acceptance, reputation and becoming competitive with its pricing to have a long and good PLC.

TiVo's product can be characterized as a high-learning product. High-learning products are products that require consumer education and have an extended introduction stage because of this. They then suffer a relatively quick growth, maturity and growth stage when compared with its introductory stage.

Mathematical Analysis

As of March 2000, the company has made losses that amount to $67,784,000. Their loss from operations is increasing at a rate of approximately 150% excluding March 2000, where their net loss decreased as a result of them decreasing the sales and marketing related costs. If the company maintains its pricing and all else stays equal given the information presented in exhibit 3, I estimate the following:

Date	New Subscribers Estimate	Revenue Estimate
Sep-00	+9.6k	$914.4k
Dec-00	-5.6k	$883.0k
Mar-01	-20.1k	$492.8k
Jun-01	-11.4k	$148.0k

Hence, it may be concluded that if everything continues in the way things are going at the moment, the product will never be profitable.

So what is needed to achieve profitability?

Assumptions	Costs Function	Units Sold
-Variable costs stays at a rate of 103.92 per consumer. -Only taking into account units sold at a price of $1000 -Fixed cost per quarter are of $24,400,000	Cost function: y = 103.92x+ 24,400,000	Break even at 27,283 units per quarter or $27,283,000 Profit of 5% at 28,805 units per quarter or $28,805,000 Profits of 10% at 30,328 units or $30,328,000
-Variable costs stays at a rate of 103.92 per consumer. -Only taking into account units sold at a price of $400 -Fixed cost per quarter are of $24,400,000	Cost function: y = 103.92x+ 24,400,000	Breakeven at 82,571 units sold per quarter or $33,028,400 in revenue. Profit of 5% at 88,149 units sold per quarter or $35,259,600 in revenue Profits of 10% at 93,726 units per quarter or $37,4904,00 in revenue

Recommended Actions

To eliminate or mitigate all the causes highlighted earlier that will subsequently alleviate the problem I will present two type of recommended actions: urgent short- term actions and substantive longer- term actions.

Short-Term

1. Reduce the price of the black box from the $1000 to $399. Hence, discontinuing the 14h capacity model.
    a. Pros
        i. Associated risk is reduced as the price decreases. Consequently, demand for the product increases.
        ii. Product becomes more competitive given the increasing competition in the market, in addition to the speculation with regards to new product.
    b. Cons
        i. Variable cost stays constant even though the company reduces the price for their output. Furthermore, the company must sale more output, hence, variable cost is bigger to obtain same profit goals.
2. Send the available stock of the 14h capacity model to retailers.
    a. Pros
        i. Customers will be able to see first hand the benefits that this products may provide them, reducing perceived complexity.
        ii. Find a use for discontinued stock.
    b. Cons
        i. There will be retailers that stay without black boxes.
3. Implement return policies and warranties.
    a. Pros
        i. Reduces cognitive dissonance and reinforce the consumer that they took the correct choice.
        ii. Reduces risk associated with buying a brand new product. Thus, demand for the product will increase!
    b. Cons
        i. It costs money that the company currently doesn't have. Moreover, the company is not in charge of the distribution, hence, it would be complicated to implement. However, a kind of subsidy can be implemented to go around this impediment.

Long-Term

1. Use consistent and complementary advertisement that sends the same message: 'You have the control.'
    a. Pros
        i. Decreases the perceived complexity of the product.
        ii. Improves and enables third-parties to marketer the product either in-store or in any other medium.
        iii. Enable customers to associate the product with an idea, which helps build a brand image for the product in addition to associating positive emotions with the product.
        iv. Builds brand awareness.
    b. Cons
        i. By associating the product with a single message through advertisement, there is a risk that consumers don't get the message and the promotional campaign fails.
        ii. There is a high cost associated with building a consistent and complementary advertising campaign through different mediums.
2. Merge with Directv
    a. Pros
        i. Increases consumer awareness and decreases perceived risk by associating with a well-known company.
        ii. Potentially improves financial standing.
    b. Cons

        i. There is a possibility that DirecTV would become an equity partner. If TiVo was bundled with the DirecTV receiver, consumers would probably face a choice between a DirecTV-Microsoft and a DirecTV-TiVo bundle at some point in the near future.

3. Continue investing in R&D to improve the product and compete with emerging competitors.
    a. Pros
        i. Remain technologically competitive in a competitive market.
        ii. Improve product and service line and potentially decrease variable cost.
    b. Cons
        i. R&D costs a lot and for a company that is not doing well as TiVo, it shouldn't be a priority.